

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:  
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## PCT

### WRITTEN OPINION OF THE INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

(PCT Rule66)

*REPLY TO WRITTEN OPINION*  
**DUE ON** JUN 12 2006

Date of mailing (day/month/year) 12 April 2006 (12-04-2006)

Applicant's or agent's file reference  
11054-14PCT

**REPLY DUE**

within TWO months/days from  
the above date of mailing

17738-8PCT

International application No.  
**PCT/CA2005/000449**

International filing date (day/month/year)  
24 March 2005 (24-03-2005)

Priority date (day/month/year)  
26 March 2004 (26-03-2004)

International Patent Classification (IPC) or both national classification and IPC  
IPC: **A61F 9/02** (2006.01), **B29D 12/02** (2006.01)

Applicant  
**SHELDON, BRENT**

1. ☒ The written opinion established by the International Searching Authority:  
☒ is ☐ is not  
considered to be a written opinion of the International Preliminary Examining Authority.
2. This second (first, etc.) opinion contains indications relating to the following items:

<input checked="" type="checkbox"/> Box No. I	Basis of the opinion
<input type="checkbox"/> Box No. II	Priority
<input type="checkbox"/> Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/> Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/> Box No. V	Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/> Box No. VI	Certain documents cited
<input type="checkbox"/> Box No. VII	Certain defects in the international application
<input checked="" type="checkbox"/> Box No. VIII	Certain observations on the international application
3. The applicant is hereby **invited to reply** to this opinion.  
**When?** See the time limit indicated above. The applicant may, before the expiration of that time limit, request this Authority to grant an extension, see Rule 66.2(e).  
**How?** By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3.  
For the form and the language of the amendments, see Rules 66.8 and 66.9.  
**Also** For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4bis.  
For an informal communication with the examiner, see Rule 66.6.  
For an additional opportunity to submit amendments, see Rule 66.4.  
  
**If no reply is filed**, the international preliminary examination report will be established on the basis of this opinion.
4. The final date by which the international preliminary report on patentability (Chapter II of the PCT) must be established according to Rule 69.2 is: 02 August 2006 (02-08-2006)

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WRITTEN OPINION OF THE  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

International application No.  
PCT/CA2005/000449

Box No. I Basis of the opinion

1. With regard to the language, this opinion has been established on the basis of:
- ☒ the international application in the language in which it was filed
  - ☐ a translation of the international application into \_\_\_\_\_, which is the language of a translation furnished for the purposes of:
    - ☐ international search (under Rules 12.3(a) and 23.1(b))
    - ☐ publication of the international application (under Rule 12.4(a))
    - ☐ international preliminary examination (under Rules 55.2(a) and/or 55.3(a))
2. With regard to the elements of the international application, this opinion has been established on the basis of (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed."*):
- ☐ the international application as originally filed/furnished
  - ☒ the description:
    - pages 1, 2 and 5 to 22 as originally filed/furnished
    - pages 3, 4 received by this Authority on January 24, 2006
    - pages \_\_\_\_\_ received by this Authority on \_\_\_\_\_
  - ☐ the claims:
    - pages \_\_\_\_\_ as originally filed/furnished
    - pages \_\_\_\_\_ as amended (together with any statement) under Article 19
    - pages 23 to 26 received by this Authority on January 24, 2006
    - pages \_\_\_\_\_ received by this Authority on \_\_\_\_\_
  - ☐ the drawings:
    - pages 1 to 8 as originally filed/furnished
    - pages \_\_\_\_\_ received by this Authority on \_\_\_\_\_
    - pages \_\_\_\_\_ received by this Authority on \_\_\_\_\_
  - ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.
3. ☒ The amendments have resulted in the cancellation of:
- ☐ the description, pages \_\_\_\_\_
  - ☒ the claims, Nos. 8 - 18
  - ☐ the drawings, sheets/figs \_\_\_\_\_
  - ☐ the sequence listing (*specify*): \_\_\_\_\_
  - ☐ any table(s) related to the sequence listing (*specify*): \_\_\_\_\_
4. ☐ This opinion has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages \_\_\_\_\_
  - ☐ the claims, Nos. \_\_\_\_\_
  - ☐ the drawings, sheets/figs \_\_\_\_\_
  - ☐ the sequence listing (*specify*): \_\_\_\_\_
  - ☐ any table(s) related to the sequence listing (*specify*): \_\_\_\_\_

**Box No. V Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability: citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	<u>1 to 7</u>	YES
	Claims	<u>NONE</u>	NO
Inventive step (IS)	Claims	<u>NONE</u>	YES
	Claims	<u>1 to 7</u>	NO
Industrial applicability (IA)	Claims	<u>1 to 7</u>	YES
	Claims	<u>NONE</u>	NO

2. Citations and explanations:

Note paragraphs enclosed in {} will not appear in the final IPRP. Furthermore, note that the remainder of this written opinion will only appear in the IPRP after the representative is given the opportunity to assess and argue the points in this written opinion.

{ The previous correspondence dated January 24, 2006 argued that the single feature that is being claimed which demonstrates an inventive step over the teachings of D1 is the claimed feature *"a permanent engagement of a projecting member having an enlarged end thereof integrated with the frame body"*. This feature was considered to be implied to one skilled in the art from the teachings of D1 during the previous WO opinion. The understanding that this was implied was based on two notions. The first notion being that an enlarged end would have a high tendency of forming naturally as a result of implementing the teachings of D1 according to the loose constraints defined in D1. The second notion was that the universal head type clamping configuration was considered to be well known in the state of the art. The previous correspondence argued that both of these proposed notions lacked merit. Thus, it is acknowledged, with respect to these arguments, that if such a feature is known to exist it must accordingly be explained or depicted in identifiable prior art. Thus, D3 and D4 are now applied to demonstrate that the enlarged molding connection configurations were well known in the state of the art, instead of suggesting that they would invariably occur naturally from the teachings of D1 or for that matter instead of merely stating that they are well known in the state of the art. Therefore, the new citations of D3 and D4 are now applied and an articulation of the combination of D1 and D3, or D1 and D4 to demonstrate the various claimed features is provided.

The combined teachings of D1 and D2 are only reapplied with respect to claims 5 and 7. D2 fails to suggest that molded interlocking buttons as depicted in Figure 7 would actually be formed during molding within a device desired to be connected to the frame. Thus, it is more likely to be understood from D2 that molded interlocking buttons are in fact fastened within a device having female sockets through the use of physical force. Claims 1 to 4 indicate that both the frame and the device (*lens*) desired to be connected to the frame are in fact rigid. Claims 1 to 4 also indicate that the frame after the molding forming step has at least a projecting member which implies that the projecting member is also rigid. Thus, D2 has no applicability to claims 1 to 4 since the device taught in D2 which is desired to be attached to a frame must have either elastic sockets for accepting the buttons as depicted in Figures 4 and 7 or otherwise have elastic projecting members. However, claims 5 to 7 do not indicate that the lens is rigid or that the projecting member is rigid, while also not indicating that during molding "at least a portion of the projecting member being received in the hollow space of the lens to achieve permanent attachment of the lens to the frame body". Thus, amended claims 5 to 7 can be construed as in fact pertaining to an elastic lens with holes for accepting projecting members with enlarged ends integrated with a frame, or claims 5 to 7 can be construed as pertaining to elastic projections insertable in rigid holes of the lens. Note that the potential manual force required for dislodging a molding interlock which was originally fastened together in a manufacturing process can be attributed to being a permanent connection. D1 teaches a frame including ventilation and shielding member intended on permanently connect to a lens. D2 teaches that a device (shielding member having a width of 0.3mm Refer to Column 4, lines 10 to 12) desired to be connected to a frame can be connected using a projection member having an enlarged end (Refer to Figures 4 and 7) for "permanent connection" per se. Thus, it would accordingly be obvious to permanently connect a frame as taught by D1 to an elastic lens by means taught by D2. D2 teaches interlocking molds which can be attributed to a permanent connection depending on the force required to dislodge the connection. Thus, D1 and D2 are only reapplied to demonstrate that claims 5 and 7 would be obvious to one skilled in the art.}

**Box No. VIII Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

Claims 1 and 5 do not comply with Article 6 as a result of lack of clarity. Claims 1 and 5 refer to the concept of "permanent engagement". However, what constitutes permanent engagement without further elaboration can be considered quite subjective. Thus, for example interlocking molded forms connecting two devices joined together by mechanical means can be considered permanent depending on the force required to separate the interlocking molded forms. Thus, the expression permanent is considered to be quite subjective and as a consequence claims 1 and 5 are correspondingly unclear.

Claim 5 does not comply with Article 6 as a result of lack of clarity. Claim 5 refers to goggles "having ventilation" which is vague. Note that most goggles can be attributed to having ventilation by design such as by the orientation which goggles interface a user's face. Furthermore, it is unclear as to whether potentially absent shielding member in various locations around a user's eyes constitutes ventilation means or whether ventilation means is something else.

**Supplemental Box**

In case the space in any of the preceding boxes is not sufficient.

Continuation of: V

The following art is applied with respect to the newly amended claims

Reapplied United States Patents as cited in the corresponding ISR

D1: US 5,867,841

D2: US 5,966,745

Newly applied citations

D3: US 4,822,671 Inventor: Carper et al. Published Apr. 18, 1989

D4: WO02/068257 Inventor: Bauhoff Published Sep. 06, 2002

Novelty

D1 does not teach an enlarged end of a projecting member as claimed in claims 1 to 7 of the alleged invention.

D2, D3 and D4 do not teach connecting a frame to a lens using a projecting member as claimed in claims 1 to 7 of the alleged invention. Thus, claims 1 to 7 are novel with respect to the discovered art and as such comply with Article 33(2).

Inventive Step

Claims 1 to 3 and 5 to 6 lack an inventive step with respect to the combined teachings of D1 and D3.

Claims 1, 2, 4, 5 and 7 lack an inventive step with respect to the combined teachings of D1 and D4.

Claims 5 and 7 lack an inventive step with respect to the combined teachings of D1 and D2.

Lack of Inventive step with respect to claims 1 to 3 and 5 to 6 considering D1 and D3:

D1 teaches the concept of molding a frame onto a lens whereby the frame includes shielding member, as claimed in claim 1 of the alleged invention (Refer to label '21' of Figure 3). D1 also teaches the concept of a frame including both ventilation and a shielding member as claimed in claim 5 of the alleged invention (Refer to labels '21' and '111' of Figure 3). D1 also indicates that the lens would have existing holes as claimed in claims 2 and 5 of the alleged invention (Refer to label '110' of Figure 3). D1 also indicates that the projecting members of a frame would fill the existing holes of a lens during molding as claimed in claim 2 (Refer to Column 4, lines 21 to 25 and Figure 3). D1 teaches that the projection members or studs would flow through, "*extend through respective holes*" as claimed in claims 3 and 6, in the expression "...in the injection molding process of the rim '10' by having the molding material flowing through and partially staying in the apertures '110'..." (Refer to Column 4, lines 21 to 25 and Figure 3). Thus, D1 teaches most of the elements as claimed in claims 1 to 3 and 5 to 6 except for indicating that "*a projecting member would have an enlarged end*" as claimed in claims 1 and 5. However, these absent claimed features in D1, are well known in the state of the art, more specifically the use of a plastic enlarged end stud for protruding through the hole of a first plastic body for the purpose of clamping the first body to a second plastic body is evident from Figure 7 of the teachings of D3. A person skilled in the art implementing the teachings of D1 for injecting frame connection molding material in a hole of a lens, as taught by D1, would accordingly consider using an enlarged end stud configuration for protruding through a hole for clamping, as taught by D3. Note that as long as this configuration of a plastic stud is known, as depicted in Figure 7 of D3, a person skilled in the art would accordingly recognize its application for connecting any two plastic bodies regardless of their size or function. Furthermore, achieving this configuration by injecting mold, such as taught by D1, would accordingly be obvious to one skilled in the art. Therefore, the features of claims 1 to 3 and 5 to 6 lack inventive step with respect to D1 in combination with D3 and as such do not comply with Article 33(3).

Lack of Inventive step with respect to claims 1, 2, 4, 5 and 7 considering D1 and D4:

Claims 1, 2, 4, 5 and 7 lack inventive step with respect to the combined teachings of D1 and D3.

The elaboration of the claimed features that D1 teaches has been indicated in the previous paragraph. The features which D1 does not teach are a "*projecting member having an enlarged end*" and "*a distance between opposed walls of the groove at an opening thereof being smaller than a distance between the opposed walls at a bottom of the groove*" as claimed in claims 5 and 7. However, the concept of using a groove having a bottom end wider than its opening for the purpose of connection two components, one of which is formed of plastic having an integrated enlarged end projecting member, is well known in the state of the art, as is evident from the teachings of D4, more specifically Figure 2C of D4.

Therefore, the features of claims 1, 2, 4, 5 and 7 lack an inventive step with respect to D1 in combination with D4 and as such do not comply with Article 33(3). Note, that it is recognized that D4 may appear to differ as a result of suggesting the fastening of plastic to metal as opposed to plastic to glass or plastic to plastic as implied in the claims of the alleged invention, however a person skilled in the art would readily recognize that the application of D4 would be pertinent to combining any two components having different melting temperatures.

**Supplemental Box**

In case the space in any of the preceding boxes is not sufficient.

Continuation of: V

Lack of Inventive step with respect to claims 5 and 7 considering D1 and D2:

Claims 5 and 7 lack an inventive step with respect to the combined teachings of D1 and D2. Claims 5 and 7, unlike claim 1, do not indicate that the lens is rigid. Claims 5 and 7 also do not indicate that the projecting member is rigid. Furthermore, claims 5 and 7 do not suggest that "such that at least a portion of the projection member is filled into the hollow space...during the frame forming step" as claimed in claim 2 of the alleged invention. Thus, it can be seen that claims 5 and 7 differ from claims 1 and 2 with respect to features and as a consequence of these absent features the teachings of D2 can be applied. D1 teaches most of the features as claimed in claims 5 to 7 including a frame which is intended on being permanently connected to a lens, whereby the frame has both ventilation means and a shielding member. The lens in D1 also has holes for receiving projecting members for securing the lens to the frame. D2 teaches that projecting members having enlarged ends, such as "interlocking molded forms such as snaps '28'...and buttons '34'...integral to the frame (Refer to Column 6, lines 32 to 36)" or "using one or more pegs '28' (Refer to Column 6, lines 29 to 30)" can be used to connect a component to a frame. D2 describes the component as being a sealing pad having a possible width of "approximately one eighth of an inch (Refer to Column 4, lines 10 to 12)". Thus, although D1 teaches mold injection of a frame member into lens holes, it would readily be apparent to one skilled in the art with reference to D2 that in fact that through the use of interlocking means (Refer to Figures 4 and 7) a frame could be permanently secured to a soft or elastic lens. Note that something that is permanently secured per se can be considered quite subjective. A manufacturer may create something for example which is intended on being permanently connected given normal conditions, however an individual may create alternate conditions by applying unnatural forces to dislodge something intended on being permanently connected. Thus, a permanent connection per se is subjective to a person's judgement. Thus, the interlocking molding connection of D2 can be attributed to being a permanent connection. Therefore, claims 5 and 7 lack an inventive step over the combined teachings of D1 and D2 and as such claims 5 and 7 do not comply with Article 33(3).

Claims 1 to 7 have industrial applicability and as such comply with Article 33(4).